Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-517
DECEMBER 3, 2002

Operations and Services
Public Weather Services, NWSPD 10-5

MULTI-PURPOSE WEATHER PRODUCTS SPECIFICATION

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/

OPR: OS22 (R. Okulski) **Certified by:** OS22 (J. Lee)
Type of Issuance: Initial.

SUMMARY OF REVISIONS: This directive supersedes WSOM Chapter C-40, Issuance 95-2 dated March 24, 1995; OML 5-98 filed with WSOM Chapter C-21, dated August 12, 1998.

Signed by 11/19/02

Gregory A. Mandt Date
Director, Office of Climate,
Water, and Weather Services

Multi Purpose Weather Products Specification

Table of Contents: Page

1. Introduction. This procedural directive provides detailed information on products Weather Forecast Offices (WFO) and the Storm Prediction Center (SPC) issue for severe, winter and/or non-precipitation weather hazards.

2. **Short Term Forecast (product category NOW)**.

2.1 Mission Connection. Short Term Forecasts provide the public with detailed weather information during significant and/or fast changing hydrometeorological conditions.

2.2 Issuance Guidelines.

2.2.1 Creation Software. WFOs should use Watch/Warning/Advisory software (WWA) or other text editors to issue Short Term Forecasts.

2.2.2 Issuance Criteria. WFOs should issue Short Term Forecasts to discuss the evolution of precipitation, convective events, winter weather, tropical cyclone landfall events, marine events, fog, significant winds, blowing dust, and extreme temperatures (excessive heat or cold) within their geographic area of responsibility.

2.2.3 Issuance Time. Short Term Forecasts are non-scheduled, event driven products. WFOs should issue Short Term Forecasts at least every 1 to 3 hours when weather conditions consistent with the issuance criteria are present or forecast.

2.2.4 Valid Time. Short Term Forecasts are valid from the time of issuance until the expiration time.

2.2.5 Product Expiration Time. The product expiration time is not more than 6 hours after the time of issuance.

2.3 Technical Description. Short Term Forecasts will follow the format and content described in this section.

2.3.1 Mass News Disseminator Broadcast Line. None.

2.3.2 Mass News Disseminator Header. The Short Term Forecast MND header is "SHORT TERM FORECAST."

2.3.3 Content. WFOs will write Short Term Forecasts in non-technical terms with the highest priority information first. WFOs should include headlines for Tornado, Severe Thunderstorm and Flood Watches, and all warnings and advisories that have valid times longer than 3 hours which are currently in effect. WFOs should write Short Term Forecasts in future tense, focusing on location, movement, intensity, precipitation amounts and duration. Short Term Forecasts may mention threats to life and property.

WFOs should avoid using call to action statements in Short Term Forecasts. Short Term Forecasts should be concise. WFOs should segment Short Term Forecast into separate zone groupings based on common weather conditions. WFOs may include additional information as time permits. Short Term Forecasts use Zone UGC codes.

2.3.4 Format.

```
FPaaii cccc ddhhmm
NOWccc

SHORT TERM FORECAST
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

STZ000-001-002-ddhhmm-
COUNTY A-COUNTY B-COUNTY C-
INCLUDING THE CITIES OF...TOWN 1...TOWN 2...TOWN 3
time am/pm time_zone day mon dd yyyy

.NOW...
...HEADLINE (FOR WATCHES...LONG DURATION WARNINGS...AND
ADVISORIES)...

THIS SECTION CONTAINS A CONCISE NON-TECHNICAL FREE TEXT PARAGRAPH
DESCRIBING EVENT TIME...DURATION...AND FORECAST CONDITIONS.

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FORECASTER NAME/NUMBER (OPTIONAL)
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Figure 1. Short Term Forecast Format

2.4 Updates, Amendments and Corrections. Short Term Forecast are not updated or amended. WFOs will correct Short Term Forecasts for format and grammatical errors.

3. **Special Weather Statement (product category SPS)**.

3.1 Mission Connection. Special Weather Statements (SPS) provide the public with information concerning ongoing or imminent weather hazards. SPSs also provide the public with notification of the cancellation of counties from a Severe Thunderstorm or Tornado Watch.

3.2 Issuance Guidelines.

3.2.1 Creation Software. WFOs should use WWA or other text editors to issue SPSs.

3.2.2 Issuance Criteria. The criteria depends on the situation the SPS is issued for. See Section 3.3.3 Content for additional details.

3.2.3 Issuance Time. SPSs are non-scheduled, event driven products.

3.2.4 Valid Time. SPSs are valid from time of issuance until the expiration or update time.

3.2.5 Product Expiration Time. The product expiration time is not more than 12 hours after the time of issuance.

3.3 Technical Description. SPSs will follow the format and content described in this section.

3.3.1 Mass News Disseminator Broadcast Line. None.

3.3.2 Mass News Disseminator Header. The SPS MND header is "SPECIAL WEATHER STATEMENT."

3.3.3 Content. WFOs will issue SPSs to cancel all or portions of a Severe Thunderstorm or Tornado Watch. WFOs should issue SPSs for ongoing or imminent weather conditions less than warning or advisory criteria. WFOs may issue SPSs for winter and non-precipitation weather outlooks. WFOs should issue SPSs to report funnel clouds. SPSs use Zone UGC codes.

3.3.4 Format.

```
WWaa8i cccc ddhhmm
SPScccc
STZ001-002-003-ddhhmm-

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

...HEADLINE...

BRIEF SUMMARY OF ONGOING OR FORECAST  WEATHER CONDITIONS LESS
THAN WARNING OR ADVISORY CRITERIA.


$$

FORECASTER NAME/NUMBER (OPTIONAL)
```

Figure 2. Special Weather Statement Format

3.4 Updates, Amendments and Corrections. SPSs should be updated as needed. WFOs will correct SPSs for format and grammatical errors.

4. **Hazardous Weather Outlook (product category HWO)**.

4.1 Mission Connection. WFOs issue Hazardous Weather Outlooks to inform the public, media, and emergency managers of the potential for winter weather, fire weather, non-precipitation, convective weather, tropical, marine or flood hazards.

4.2 Issuance Guidelines.

4.2.1 Creation Software. WFOs should use WWA or other text editors for HWO products.

4.2.2 Issuance Criteria. The HWO is a dynamic product that should be updated whenever necessary to always depict the latest expected weather hazards for Days One through Seven.

4.2.3 Issuance Time. WFOs will issue HWOs each day. WFOs should issue HWOs between 5 am and 7 am local time, except where local customers request a different issuance time.

4.2.4 Valid Time. An outlook is valid from the time of issuance until the next scheduled issuance or update.

4.2.5 Product Expiration Time. The product expiration time is 24 hours from issuance time.

4.3 Technical Description. HWOs will follow the format and content described in this section.

4.3.1 Mass News Disseminator Broadcast Line. None.

4.3.2 Mass News Disseminator Header. The HWO MND header is "HAZARDOUS WEATHER OUTLOOK."

4.3.3 Content. Hazardous weather outlooks will describe in concise non-technical terms the specific weather hazards of concern for the first and second forecast periods. HWOs should also briefly discuss in non-technical terms any weather hazards in the Day Two through Seven time period. The weather hazard threshold is the potential issuance of an outlook, watch, warning or advisory for a particular weather phenomena. WFOs may include headlines for watches, warnings, advisories and significant weather hazards. WFOs may include actual days of the week such as "TODAY" after ".DAY ONE..." and "SATURDAY THROUGH THURSDAY" after ".DAYS TWO THROUGH SEVEN..."

HWOs should include instructions to spotters and emergency managers. If no weather hazards are expected during the next 24 hours, WFOs will write one of the following statements: "NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME" or "THE PROBABILITY FOR WIDESPREAD HAZARDOUS WEATHER IS LOW" in the Day One section. If no weather

hazards are expected during Days Two through Seven, WFOs will write "NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME " or "THE PROBABILITY FOR WIDESPREAD HAZARDOUS WEATHER IS LOW" in the Day Two Through Seven section. The HWO should include a short description of the geographical area covered. HWOs will use the Zone UGC code.

Weather hazards include the following:

a. Convective Weather. WFOs will discuss convective weather hazards such as large hail, damaging winds, and tornadoes. WFOs may include information on strong (less then severe) convection.

b. Winter Weather. WFOs will discuss winter weather hazards such as snow, freezing rain, sleet, or a mixture of these weather phenomena.

c. Non Precipitation. WFOs will discuss non-precipitation weather hazards such as strong winds, blowing dust and sand, excessive heat and cold, and dense fog.

d. Fire Weather. WFOs will discuss fire weather hazards such as extremely dry conditions, strong gusty winds, and dry thunderstorms.

e. Flooding. WFOs will discuss flood hazards such as flash flooding and long duration river flooding. WFOs may include information on small stream flood advisory situations and life threatening flood prone areas such as narrow canyons.

f. Marine. WFOs should discuss marine hazards such as heavy/high surf, strong gusty winds on open water, and coastal flood damage.

g. Tropical. WFOs will discuss tropical hazards such as tropical storm and hurricane force winds, storm surge, and excessive rainfall. HWOs will not mention tropical cyclone activity beyond guidance provided by the Tropical Prediction Center

4.3.4 Format.

FLaa4i cccc ddhhmm
HWOccc
STZ001-002-003-ddhhmm-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE city state
time am/pm time_zone day mon dd yyyy

...HEADLINE FOR ACTIVE WATCHES, WARNINGS, ADVISORIES OR SIGNIFICANT WEATHER HAZARDS... (OPTIONAL)

THIS HAZARDOUS WEATHER OUTLOOK IS FOR PORTION OF STATE(S).

.DAY ONE...ACTUAL DAY OF THE WEEK (SUCH AS TODAY OR THIS AFTERNOON)

WFOS WILL DISCUSS IN CONCISE NON-TECHNICAL TERMS EACH HAZARD'S IMPACT IN A FREE TEXT FORMAT FOR THE FIRST AND SECOND FORECAST PERIODS. WFOS MAY REFERENCE SUPPORTING WARNINGS, WATCHES, ADVISORIES, AND STATEMENTS.

.DAYS TWO THROUGH SEVEN...ACTUAL DAYS OF THE WEEK (SUCH AS MONDAY THROUGH SATURDAY)

WFOS SHOULD DISCUSS IN CONCISE NON-TECHNICAL TERMS EACH HAZARD'S IMPACT IN A FREE TEXT FORMAT FOR DAYS TWO THROUGH SEVEN. WFOS MAY REFERENCE SUPPORTING WARNINGS, WATCHES, ADVISORIES, AND STATEMENTS. THIS SECTION IS A "HEADS UP" FOR PLANNING PURPOSES.

.SPOTTER INFORMATION STATEMENT...

INSTRUCTIONS TO SPOTTERS OR EMERGENCY MANAGERS. WFOS MAY OMIT THIS SECTION IF NO HAZARDOUS WEATHER IS EXPECTED IN BOTH THE DAY ONE AND DAYS TWO THROUGH SEVEN TIME PERIODS.

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FORECASTER NAME/NUMBER (OPTIONAL)

Figure 3. Hazardous Weather Outlook Format

4.4 Updates, Amendments and Corrections. WFOs should update the HWO if the forecast for hazardous weather changes. WFOs will correct outlooks for format and grammatical errors.

5. Preliminary Local Storm Report (product category LSR).

5.1 Mission Connection. Preliminary Local Storm Reports provide the Storm Prediction Center (SPC), adjacent WFOs, the public, media and emergency managers with reported observations of severe weather events.

5.2 Issuance Guidelines.

5.2.1 Creation Software. WFOs should use the AWIPS LSR generation macro for reports.

5.2.2 Issuance Criteria. WFOs will issue LSRs for all severe events, such as reported tornadoes, severe criteria hail and wind gusts, wind damage, and flash flooding. LSRs should be issued as close to real time as possible. Events reported more than seven days after occurrence will be included in monthly Storm Data reports.

5.2.3 Issuance Time. LSRs are non-scheduled, event driven products.

5.2.4 Valid Time. LSRs are valid upon issuance.

5.2.5 Product Expiration Time. Not applicable.

5.3 Technical Description. LSRs will follow the format and content described in this section.

5.3.1 Mass News Disseminator Broadcast Line. None.

5.3.2 Mass News Disseminator Header. The LSR MND header is "PRELIMINARY LOCAL STORM REPORT."

5.3.3 Content. LSRs will follow a national standard format. SPC uses this format to decode local reports into national hourly and daily reports. All fields of data will begin at the prescribed column of the page. The report should include type of phenomena, date/time of occurrence (including time zone), location of event (including state, county, direction, and distance from a well known site), source of the report, damage, deaths, and/or injuries and remarks to convey other noteworthy information about the event. At the end of each LSR, WFOs may use a delimiter "&&" to provide a narrative summary of weather events.

5.3.4 Format.

The following is a breakdown of the different fields used in each report, along with the columns used for each:

Description	Column #
Time of event	01-08, line 1
Date of event	01-08, line 2
Location of event (i.e., 10 W TROY)	12-36, line 1
County involved	12-36, line 2
State	38-39, line 1
Type/Magnitude of event	43-69, line 1
Fatalities and injuries	43-69, line 2
Remarks	43-69 for each line needed

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NWaa5i Kccc DDHHMM
LSRccc

PRELIMINARY LOCAL STORM REPORT
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

TIME(XDT).....CITY LOCATION.....  STATE    ...EVENT/REMARKS...
              COUNTY LOCATION....

TIME XM        TOWN                ST       X.XX INCH HAIL
MM/DD/YY       COUNTY                       NUMEROUS CAR AND
                                            HOMES DAMAGED

TIME XM        TOWN                ST       TORNADO
MM/DD/YY       COUNTY                       *** X DEAD,XX INJ***


TIME XM        TOWN                ST       XX MPH WIND GUST
MM/DD/YY       COUNTY                       *** X INJ ***
                                            XX TREES DOWN

TIME XM        TOWN                ST       WIND DAMAGE
MM/DD/YY       COUNTY                       *** X INJ ***
                                            XX TREES DOWN

TIME XM        TOWN                ST       FLASH FLOOD
MM/DD/YY       COUNTY                       X FEET WATER FLOWING
                                            ACROSS HIGHWAY XX
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Figure 4. Local Storm Report

5.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. WFOs will issue a new LSR if the office receives new reports of severe weather or updated

information on previously reported severe weather. WFOs will correct statements for format and grammatical errors.

6. **Mesoscale Discussion (product category MCD)**.

6.1 Mission Connection. SPC issues Mesoscale Discussions to convey to WFOs, the public, media and emergency managers the current meteorological reasoning for short term hazardous weather concerns.

6.2 Issuance Guidelines.

6.2.1 Creation Software. SPC will use the National Centers NAWIPS text editor.

6.2.2 Issuance Criteria. MCDs issuance criteria depends on the type of weather hazard. Refer to Section 6.3.3 Content for details.

6.2.3 Issuance Time. MCDs are non-scheduled, event driven products.

6.2.4 Valid Time. A discussion is valid from the time of issuance until the expiration or update time.

6.2.5 Product Expiration Time. The expiration time is the end of the valid time.

6.3 Technical Description. MCDs will follow the format and content described in this section.

6.3.1 Mass News Disseminator Broadcast Line. Not applicable.

6.3.2 Mass News Disseminator Header. The MCD MND header is "MESOSCALE DISCUSSION."

6.3.3 Content. SPC uses the Mesoscale Discussion (MCD) to alert WFOs and various customers to different types of short term weather hazards. Each subsection will address a type of hazard covered by a MCD.

a. Severe Potential/Convective Trends. SPC should issue a MCD for severe potential 1 to 2 hours prior to a severe thunderstorm or tornado watch issuance. SPC should also issue an MCD for severe potential when monitoring an area for a potential convective watch or when thunderstorm development that is potentially severe, but does not have enough areal coverage or expected to last long enough for a convective watch issuance. MCDs are also normally issued at least every 2 to 3 hours for each convective watch that is in effect and focus on mesoscale and storm scale features affecting the severe weather within the watch area.

b. Convective Heavy Rainfall. SPC should issue a MCD for localized areas where rainfall rates equal to or greater than 3 inches per hour, or 2 or more inches are expected at any one location in one hour, or rainfall rates of 1.5 inches per hour are expected to occur for 3 hours or greater. SPC may issue a Convective Heavy Rain MCD to forecast the end of a heavy rain event.

c. Heavy Snowfall. SPC should issue a MCD for snowfall accumulation rates of 1 inch per hour or greater for a period of 2 hours or greater at elevations below 4000 feet MSL (mean sea level) and accumulation rates of 2 inches per hour or greater for a period of 2 hours or greater at elevations above 4000 feet MSL. Discussions may also address precipitation trends (increasing or decreasing rates), and climatologically rare events.

d. Freezing Rain. SPC should issue a MCD for freezing rain accumulations greater than .05 inch per hour for a period of 3 hours or greater. Discussions may also address where a precipitation type is forecast to change from liquid to freezing or freezing to liquid.

e. Blizzard. SPC should issue a MCD for mesoscale blizzard conditions forecast to persist 3 hours or greater.

f. Convective Outlook Upgrade. SPC should issue a MCD when considering an upgrade of an outlook risk (to moderate or high) or probability (above 15% or adding a "significant" severe area). SPC will issue this type of MCD prior to the 1300, 1630, or 2000 UTC convective outlook issuance times, and describe the area to be upgraded. This MCD will refer to the preceding outlook discussion.

6.3.4 Format.

```
ACUS11 KWNS ddhhmm
SWOMCD
STZ000-STZ000-ddhhmm-

MESOSCALE DISCUSSION nnnn
NWS STORM PREDICTION CENTER NORMAN OK
time am/pm time_zone day mon dd yyyy

AREAS AFFECTED...(PORTION OF STATES OR GEOGRAPHICAL AREAS)...

CONCERNING...(WEATHER HAZARD)

VALID DDHHMMZ-DDHHMMZ

DISCUSSION TO CONVEY METEOROLOGICAL REASONING FOR MESOSCALE
DISCUSSION.

...PLEASE SEE WWW.SPC.NOAA.GOV FOR GRAPHICAL PRODUCT...

...FORECASTER NAME...MM/DD/YY

ATTN...WFO A...WFO B... (AFFECTED WFOS)

LAT/LON CORNER POINTS FOR MCD GRAPHIC

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Figure 5. Mesoscale Convective Discussion

6.4 Updates, Amendments and Corrections. SPC will issue updates as required. SPC will correct messages for format and grammatical errors.

APPENDIX A - Examples

Table of Contents: Page

1. Introduction. This appendix provides product examples for the WFOs, SPC and the public.

2. Short Term Forecast.

FPUS71 KCTP 031702
NOWCTP

SHORT TERM FORECAST
NATIONAL WEATHER SERVICE STATE COLLEGE PA
1202 PM EST WED APR 3 2002

PAZ028-036-041-042-046-049>053-056>059-063>066-032002-
ADAMS-COLUMBIA-CUMBERLAND-DAUPHIN-FRANKLIN-JUNIATA-LANCASTER-
LEBANON- MONTOUR-NORTHERN LYCOMING-NORTHUMBERLAND-PERRY-
SCHUYLKILL-SNYDER- SOUTHERN LYCOMING-SULLIVAN-UNION-YORK-
INCLUDING THE CITIES OF...HARRISBURG...LANCASTER...WILLIAMSPORT...YORK
1202 PM EST WED APR 3 2002

.NOW...
NUMEROUS SHOWERS...SOME HEAVY...WILL BE ACROSS THE SUSQUEHANNA VALLEY EARLY THIS AFTERNOON. RAIN WILL BE FROM NEAR WILLIAMSPORT...SOUTHWARD ACROSS HARRISBURG...TO JUST WEST OF CHAMBERSBURG EARLY ON. THE LEADING EDGE OF THE RAIN WILL BE NEAR A LANCASTER...YORK LINE BY 1 PM. THE ACTIVITY WILL BE EAST OF THE SUSQUEHANNA VALLEY BY 3 PM.
$$

3. Special Weather Statement.

WWUS81 KBOX 242000
SPSBOX
MAZ001>024-CTZ001>012-RIZ001>007-251000-

SPECIAL WEATHER STATEMENT
NATIONAL WEATHER SERVICE TAUNTON MA
300 PM EST TUE DEC 24 2002

...A WHITE CHRISTMAS FOR SOUTHERN NEW ENGLAND...

A WINTER STORM WILL FORM OFF THE COAST OF NEW JERSEY THIS EVENING... BUT WILL MOVE QUICKLY TO THE NORTHEAST AND BE EAST OF CAPE COD BY CHRISTMAS MORNING.

PERIODS OF LIGHT TO MODERATE SNOW WILL DEVELOP ACROSS SOUTHERN NEW ENGLAND THIS EVENING. ACCUMULATIONS OF 1 TO 3 INCHES ARE EXPECTED BEFORE THE SNOW TAPERS OFF CHRISTMAS MORNING.

MOTORISTS SHOULD BE PREPARED FOR ICY ROAD CONDITIONS...PARTICULARLY ON LESS TRAVELED ROADS THIS HOLIDAY EVENING. STAYED TUNED TO NOAA WEATHER RADIO AND LOCAL TELEVISION STATIONS FOR THE LATEST INFORMATION ON THE HOLIDAY WINTER WEATHER.

$$

4. Hazardous Weather Outlook.

(Severe Convective Weather)

FLUS43 KTOP 021130
HWOTOP
KSZ001>024-026>056-058-059-061>072-074>096-098>100-031130-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE TOPEKA KS
630 AM CDT FRI AUG 2 2002

THIS HAZARDOUS WEATHER OUTLOOK IS FOR NORTHEAST KANSAS.

.DAY ONE...TODAY

THERE IS A MODERATE RISK OF SEVERE THUNDERSTORMS THIS AFTERNOON THROUGHOUT EASTERN KANSAS. THUNDERSTORMS MAY PRODUCE DAMAGING WIND GUSTS AND LARGE HAIL. ISOLATED TORNADOES ARE POSSIBLE.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SKYWARN SPOTTER ACTIVATION WILL LIKELY BE NEEDED THIS AFTERNOON.

$$

(Flooding)

FLUS45 KTWC 201400
HWOTWC
AZZ019-029>035-211400-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE TUCSON AZ
700 AM MST FRI SEP 20 2002

THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHEAST ARIZONA.

.DAY ONE...TODAY

THE REMNANTS OF HURRICANE JULIO WILL BRING MODERATE TO HEAVY RAIN TODAY AND TONIGHT. WASHES AND SMALL RIVERS WILL RISE QUICKLY THIS AFTERNOON AND TONIGHT. FOR FURTHER DETAILS PLEASE REFER TO THE FLOOD WATCH PRODUCT ISSUED BY THIS OFFICE AT 400 AM.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

UNORGANIZED SEVERE CONVECTION MAY OCCUR SUNDAY AND MONDAY...OTHERWISE NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SKYWARN SPOTTER ACTIVATION WILL BE NEEDED TODAY AND TONIGHT.

$$

(High Wind/Marine/Heavy Snow)

FLUS46 KMFR 201500
HWOMFR
ORZ021>031-CAZ080>084-211500-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MEDFORD OR
700 AM PST FRI DEC 20 2002

THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHWEST OREGON AND NORTHEAST CALIFORNIA.

.DAY ONE...TODAY

A PACIFIC WINTER STORM WILL BRING HIGH WINDS WITH HURRICANE FORCE GUSTS AND HIGH SEAS TO THE SOUTH OREGON COAST TODAY. THIS WINTER STORM WILL ALSO BRING HEAVY SNOW TO THE MOUNTAINS OF SOUTHWEST OREGON AND NORTHEAST CALIFORNIA ABOVE 5000 FEET TONIGHT. FOR FURTHER DETAILS ON THIS STORM PLEASE REFER TO THE HIGH WIND WARNING...GALE WARNING AND HEAVY SNOW WARNING ISSUED BY THIS OFFICE AT 400 AM.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

ANOTHER PACIFIC WINTER STORM WILL MOVE INTO THE PACIFIC NORTHWEST MONDAY NIGHT AND TUESDAY. THIS STORM IS EXPECTED TO BRING MORE VALLEY RAIN AND MOUNTAIN SNOW.

.SPOTTER INFORMATION STATEMENT...

SKYWARN SPOTTER ACTIVATION MAY BE NEEDED TONIGHT AND SATURDAY.

$$

(No Hazardous Weather)

FLUS45 KEPZ 031400
HWOEPZ
TXZ055>056-NMZ022>025-030>032-041400-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE EL PASO TX
700 AM MST FRI APR 3 2003

THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHERN NEW MEXICO AND EXTREME SOUTHWEST TEXAS.

.DAY ONE...TODAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

$$

(Unorganized Convective Weather)

FLUS44 KMOB 021000
HWOMOB
ALZ051>064-FLZ001>006-MSZ067-075-076-078-079-031100-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MOBILE AL
600 AM CDT FRI AUG 02 2002

THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHERN ALABAMA... SOUTHEAST MISSISSIPPI AND THE EXTREME WESTERN PORTION OF THE FLORIDA PANHANDLE.

.DAY ONE...TODAY

SCATTERED THUNDERSTORMS WILL DEVELOP ALONG THE ALABAMA AND MISSISSIPPI COAST THIS AFTERNOON. SOME OF THESE THUNDERSTORMS MAY BECOME SEVERE WITH WIND GUSTS TO 65 MPH AND UP TO ONE INCH HAIL. SOME THUNDERSTORMS MAY ALSO PRODUCE HEAVY RAIN AND LOCALIZED FLASH FLOODING.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.SPOTTER INFORMATION STATEMENT...

SKYWARN SPOTTER ACTIVATION MAY BE REQUIRED THIS AFTERNOON.

$$

(Excessive Heat)

FLUS41 KPHI 021000
HWOPHI
DEZ001-NJZ015-017>019-PAZ067>071-031000-

HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MOUNT HOLLY NJ
600 AM EDT FRI AUG 2 2002

THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHEAST PENNSYLVANIA...
CENTRAL AND SOUTHERN NEW JERSEY AND THE NORTHERN DELMARVA.

.DAY ONE...TODAY

NO HAZARDOUS WEATHER IS EXPECTED AT THIS TIME.

.DAYS TWO THROUGH SEVEN...SATURDAY THROUGH THURSDAY

EXCESSIVE HEAT IS ANTICIPATED EARLY NEXT WEEK.

HIGH PRESSURE DRIFTING OFF THE MID ATLANTIC COAST LATE SATURDAY
WILL PUMP VERY HOT AND HUMID AIR INTO THE REGION EARLY NEXT WEEK.
EXCESSIVELY HOT AND HUMID WEATHER CONDITIONS MAY BECOME
DANGEROUS MONDAY THROUGH WEDNESDAY.

.SPOTTER INFORMATION STATEMENT...

SPOTTER ACTIVATION WILL NOT BE NEEDED.

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5. Preliminary Local Storm Report.

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NWUS53 KEAX 230800
LSRMCI

PRELIMINARY LOCAL STORM REPORT
NATIONAL WEATHER SERVICE KANSAS CITY/PLEASANT HILL MO
300 AM CDT SUN JUL 23 2000

TIME(CDT).....CITY LOCATION.....  STATE   ...EVENT/REMARKS.......
              COUNTY LOCATION....

0934 PM       KANSAS CITY          MO     1 INCH HAIL
07/22/00      JACKSON                     HAIL COVERED THE GROUND UP
                                          TO 3 INCHES DEEP.  NUMEROUS
                                          CARS AND HOMES DAMAGED.


1005 PM       3 E PLEASANT HILL    MO     TORNADO
07/22/00      CASS                        *** 3 DEAD, 25 INJ ***
                                          10-15 HOMES DESTROYED.


1008 PM       1 S BLUE SPGS        MO     2.75 INCH HAIL
07/22/00      JACKSON                     *** 2 INJ ***
                                          MINOR INJURIES OCCURRED IN
                                          LOCAL PARK.  SEVERAL CARS
                                          DAMAGED.

1008 PM       BLUE SPGS            MO     68 MPH TSTM GUST
07/22/00      JOHNSON                     TREES AND POWER LINES DOWN.

1130 PM       NR OLATHE            KS     WIND DAMAGE
07/22/00      JOHNSON                     TREES BLOWN DOWN.

1210 AM       KEARNEY              MO     FLOODING
07/23/00      CLAY                        3-4 INCHES OF RAIN CAUSED
                                          FLOODING OF SEVERAL
                                          LOW-LYING AREAS.

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6. Mesoscale Discussion.

(Heavy Snow)

ACUS11 KWNS 232006
SPCMCD
NYZ000-PAZ000-OHZ000-240500-

MESOSCALE DISCUSSION 0001
NWS STORM PREDICTION CENTER NORMAN OK
206 PM CST WED JAN 23 2002

AREAS AFFECTED...SWRN NY/NWRN PA/NERN OH
CONCERNING...HEAVY SNOW...

VALID 232006Z - 240500Z

LAKE EFFECT SNOWFALL RATES OF 1-2" PER HOUR ARE EXPECTED TO DEVELOP BY EARLY THIS EVENING OVER SOUTHERN ERIE AND NORTHERN CHAUTAUQUA COUNTIES IN NEW YORK. THE BAND WILL LIKELY SHIFT SOUTH DURING THE EVENING REACHING PARTS OF CATTARAUGUS...ERIE COUNTY PENNSYLVANIA... AND PERHAPS ASHTABULA COUNTY OHIO.

12Z ETA MODEL SUGGESTS POTENTIAL FOR SINGLE BAND LAKE EFFECT EVENT TO BEGIN DURING LATE AFTERNOON AND CONTINUE TONIGHT. NEARLY UNIDIRECTIONAL FLOW FROM 260 DEGREES AT LOW LEVELS SUGGEST BAND WILL INITIALLY BE AIMED AT SOUTHERN ERIE COUNTY NY...WITH FLOW FORECAST TO GRADUALLY VEER TO ABOUT 290 DEGREES BY 24/06Z. THUS...THE BAND SHOULD SHIFT SOUTHWARD WITH TIME AND EVENTUALLY REACH ERIE COUNTY PA LATE THIS EVENING.

850 MB TEMPERATURE FORECAST SHOWS TEMPERATURES DROPPING FROM -7 C EARLY THIS AFTERNOON TO ABOUT -9 C BY 24/06Z. THE CORRESPONDING LAKE-850 MB TEMPERATURE DIFFERENCE SHOULD INCREASE FROM 16 TO 18 C. MODEL FORECAST SOUNDINGS SHOW STEEP LOW LEVEL LAPSE RATES WITH MIXED LAYER EXTENDING TO ABOUT 700 MB. HIGHEST ETA FORECAST VALUES OF SFC-700 MB UPWARD MOTION AND RELATIVE HUMIDITY REMAIN CENTERED OVER THE ERIE PA AREA THROUGH THE EVENING...LIKELY ENHANCED BY APPROACHING SHORT WAVE TROUGH. THE ASSOCIATED VORTICITY MAXIMUM IS FORECAST TO CROSS WI AND REACH SERN MI BY LATE THIS EVENING.

ALTHOUGH CURRENT SURFACE TEMPERATURES ARE IN THE UPPER 30S... UPSTREAM DEWPOINTS OVER NORTHERN OHIO HAVE STEADILY DROPPED INTO THE MIDDLE 20S. WET-BULB COOLING AND CONTINUED COLD ADVECTION

THROUGH THE EVENING SHOULD ENSURE THAT PRECIPITATION FALLS AS ALL SNOW BY LATE AFTERNOON. LATEST WSR-88D AND VISIBLE SATELLITE IMAGERY SHOWS POSSIBLE DEVELOPMENT OF SINGLE BAND OVER LAKE ERIE OFF OF THE OH/PA COASTLINES. THUS...HEAVIER SNOWS SHOULD DEVELOP BY 2300Z OVER WESTERN NEW YORK.

...PLEASE SEE WWW.SPC.NOAA.GOV FOR GRAPHICAL PRODUCT...

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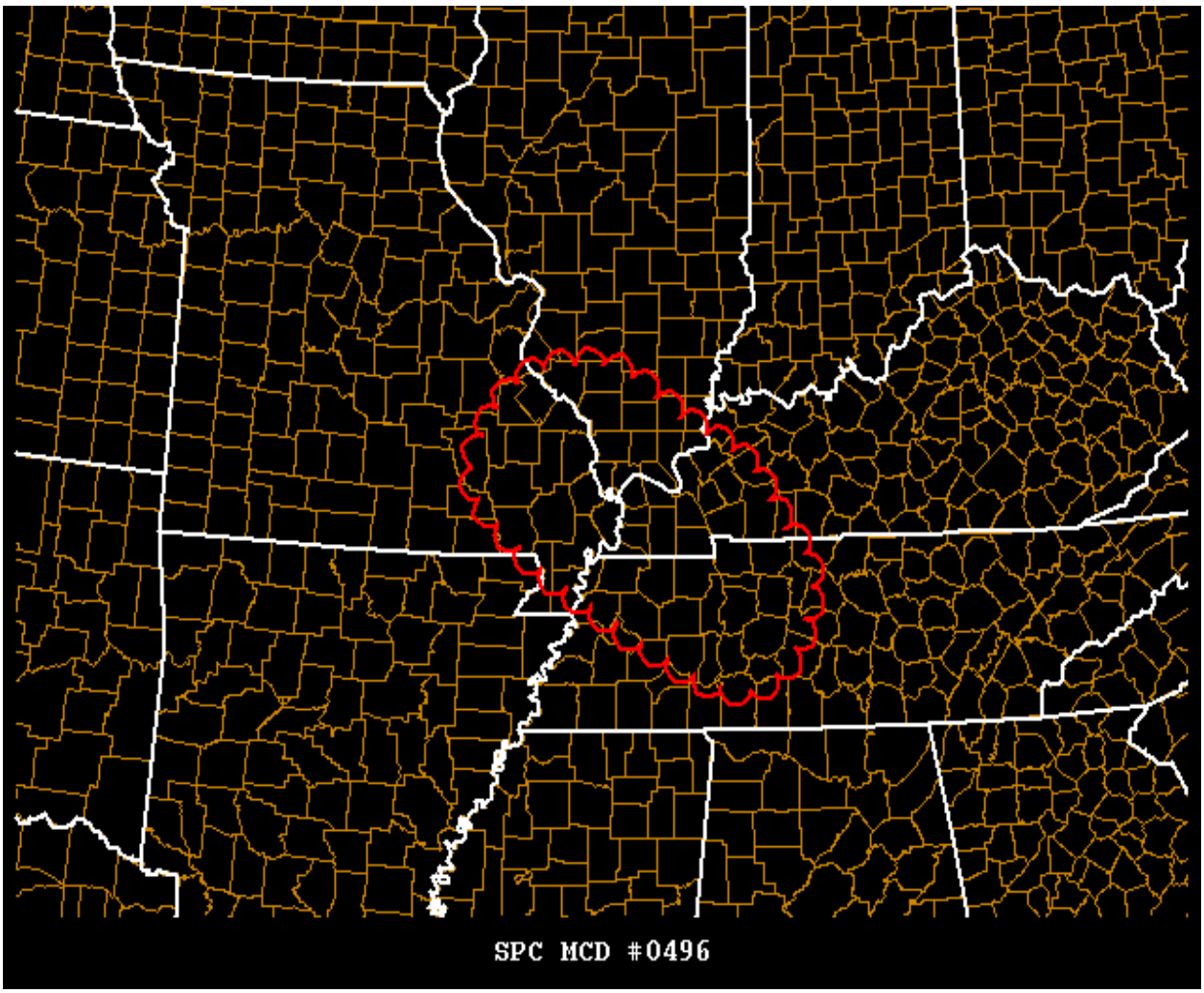
(Severe Thunderstorm Graphic)



(Severe Thunderstorm Discussion)

ACUS11 KWNS 081640
SWOMCD
LAZ000-MSZ000-240500-

MESOSCALE DISCUSSION 0333
NWS STORM PREDICTION CENTER NORMAN OK
1040 AM CDT MON APR 8 2002

AREAS AFFECTED...SERN LA/SRN MS
CONCERNING...SEVERE THUNDERSTORM POTENTIAL...

VALID 081640Z - 081900Z

SQUALL LINE IS EXPECTED TO INTENSIFY OVER THE NEXT COUPLE OF HOURS WITH INCREASING THREAT FOR DAMAGING WINDS AND PERHAPS ISOLATED TORNADOES. A WEATHER WATCH WILL LIKELY BE REQUIRED IN THE NEXT HOUR OR SO. INTENSITY OF SLIGHTLY ELEVATED SQUALL LINE FROM SOUTHWEST MISSISSIPPI INTO SOUTH CENTRAL LOUISIANA HAS INCREASED IN THE PAST HOUR AS ACTIVITY APPROACHES WARM SECTOR. LINE CURRENTLY IN THE VICINITY OF BATON ROUGE LA MOVING EAST AROUND 35 KNOTS. EXTRAPOLATION HAS STORMS MOVING INTO MLCAPE IN EXCESS OF 1000 J/KG AFTER 1730Z...AND THROUGH THE NEW ORLEANS METRO AREA BY 1900Z. WITH MLCAPE OF 1000-2000 J/KG ALONG THE COAST AND CONTINUED DESTABILIZATION LIKELY...EXPECT INCREASING SEVERE THREAT OVER THE NEXT COUPLE OF HOURS. USING CURRENT SQUALL LINE MOTION AND SLIDELL WSR-88D HODOGRAPH...CURRENT 0-2 KM STORM RELATIVE FLOW EXCEEDS 50 KNOTS. THUS EMBEDDED BOW ECHOES WITH WIND DAMAGE AND PERHAPS A TORNADO OR TWO ARE POSSIBLE AS ACTIVITY BECOMES SURFACE BASED.

...PLEASE SEE WWW.SPC.NOAA.GOV FOR GRAPHICAL PRODUCT...

..CRAVEN..04/08/02

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(Heavy Rainfall)

ACUS11 KWNS 081725
SWOMCD
LAZ000-242200-

MESOSCALE DISCUSSION 0335
NWS STORM PREDICTION CENTER NORMAN OK
1125 AM CDT MON APR 8 2002

AREAS AFFECTED...SERN LA COASTAL AREA
CONCERNING...HEAVY RAINFALL...

VALID 081725Z - 082200Z

TRAINING THUNDERSTORMS WITH HOURLY RAINFALL RATES OF 1.5 TO 2.5 INCHES RESULTING IN TOTAL RAINFALL OF UP TO 5 INCHES ARE ANTICIPATED THROUGH ABOUT 2200Z IN A 25-50 MILE WIDE BAND FROM 20 SW 7R4 TO 30 NW BVE. IN ADDITION TO THREAT FOR SEVERE PER MESOSCALE DISCUSSION 333...MCC WILL PRODUCE HEAVY RAINFALL ALONG STALLED PORTION OF OUTFLOW BOUNDARY THIS AFTERNOON. LEWP/MESOLOW CURRENTLY ABOUT 75 SSE BPT IS TRACKING EAST AT 25 KNOTS..AND SHOULD BE ABOUT 55 SSW HUM BY 2200Z. RAINFALL RATES ALONG STALLED PORTION OF SQUALL LINE CURRENTLY OVER VERMILION PARISH HAVE INCREASED IN THE PAST HOUR...WITH HOURLY RATES AS HIGH AS 3 INCHES. CURRENT GOES PRECIPITABLE WATER VALUES OVER LOUISIANA ARE IN EXCESS OF 1.75 INCHES...OR 190 PERCENT OF NORMAL. COUPLED WITH LIGHT AND VARIABLE CORFIDI MCS MOTION VECTORS...TRAINING THUNDERSTORMS WITH HEAVY RAINFALL SHOULD CONTINUE JUST NORTH OF MESOLOW TRACK IN THE NEXT SEVERAL HOURS. THE NEW ORLEANS METRO AREA WILL BE ON NORTHERN EDGE OF THREAT AREA...WITH HIGHER PROBABILITY OF HEAVY RAINFALL PROBABLY JUST TO THE SOUTH OVER TERREBONNE AND LAFOURCHE PARISHES.

...PLEASE SEE WWW.SPC.NOAA.GOV FOR GRAPHICAL PRODUCT...

..CRAVEN..04/08/02

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